ESO 989

MEAT AND LIVESTOCK IN NATIONAL FOOD POLICY [1/]

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Introduction

This nation's food policy consists of an amalgamation of government programs and policies that fit under such headings as commodity programs, food assistance, marketing policy, and food safety. With milk and dairy products as major exceptions and things like wool and mohair as minor exceptions, meat and livestock are not directly included in agricultural commodity policy. Furthermore, meat is typically not singled-out from other foods in many other aspects of food policy, particularly those policies and programs that deal with human nutrition and health. Therefore, the interactions between the livestock/meat industries and food policy are widely scattered. There is no single set of policies upon which to dwell; rather a potpourri of seemingly unrelated issues must be brought into focus.

My purpose is to identify what are, and equally important what are not, current and emerging food policy issues regarding the meat and livestock sector. First, I will briefly examine the role of livestock and meat in both the food system and in the economy in general. Then, I will use this assessment as a basis for identifying real, and dismissing imaginary public policy issues that concern your industry.

Meat Animals in the Food System

The meat and livestock sector provides consumers with a source of

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energy and protein that is generally considered to be desirable, it provides a degree of stability in the food supply that is generally not achievable with crops alone, and it provides a nation with greater economic security. But, livestock also have physiological characteristics which complicate production. Each of these factors affects the interface between this part of the agricultural economy and food policy.

Meat. The end product of this sector is meat: red from beef, pork and lamb; and white from poultry. Meat constitutes about 20 percent of the average American diet and accounts for about one-third of total consumer expenditures on food. Overall, it is the most important source of protein in our diets, and it is obviously considered by most consumers to be a pleasant and tasty source of energy. Demand for meat is more income elastic than is food in general, meaning that, as income goes up, consumers typically increase their purchases of meat more than other foods. In recent years, American consumers have grown relatively more fond of white meats, which now account for about 30 percent of all meat consumption compared to about 20 percent two decades ago.

Not everyone, however, considers meat to be a premier food. Vegetarians exist, and many others are increasingly concerned about the implications of meat consumption for human health. This give rise to a number of issues to which I will return momentarily.

Food Supply Stability. Meat animals are important to stability in the available supply of food. This comes about for a couple of reasons: 1) livestock store food supplies from years of plentiful crop harvests to years of crop shortfalls, and 2) they utilize energy sources as feed that would otherwise go to waste. Simply put, livestock are scavengers.

The food storage function results from herd building

in times of large crops (and presumably low feed prices) and herd liquidation in times of small crops and high grain prices. All things considered, I don't know if this storage function is cheaper than putting grain in the farmer-held reserve, but it certainly puts less drain on the federal treasury. We do know that feed grain consumption in the U.S. was cut by more than 15 million tons in the 1980-81 crop year as livestock numbers were reduced in response to the high grain prices associated with the short 1980 crop, and by more than 30 million tons in 1974-75 in response to the same kinds of crop problems and high feed grain prices.

The scavenger function of meat animals is even more straightforward. Obvious is the case of grass and ruminant animals such as cattle and sheep. But hogs and poultry are also capable of utilizing fallen grain, plant remains of harvested crops, garbage, distillers by-products and other offal and waste. This makes for a relatively low cost source of protein and energy for the human diet, particularly when grains and oilseeds are in short supply.

Self-sufficiency. Not entirely divorced from the ability to stabilize food supplies is the contribution that meat animals make to a nation's self-sufficiency in food, and to its economic security. Both livestock and meat production are highly transferrable. That is, they are not particularly sensitive to climatic conditions and other geophysical differences. If feed is available, meat animals of some sort can be grown just about anywhere. And, meat production is dependent primarily upon the availability of slaughter livestock and the requisite labor skills, neither of which is location specific.

Furthermore, animal production is an important element of many national economies, and the less developed countries in particular.

It allows land to be used for pasture that is not capable of sustaining crop production, at least with present technology and price relationships. It provides employment for many who have no other opportunity. In many less developed nations, livestock provide a major source of locomotive power and, through herd building, are a primary means for creating wealth and personal savings.

Because animal agriculture is of such importance to national economic interests, most countries protect their domestic meat and livestock industries through trade barrier policies such as import quotas, duties, and tariffs. As a result, relatively little international trade occurs in livestock or meat. In 1980, for example, livestock and meat accounted for about 40 percent of the total value of world agricultural production, but just 11 percent of the total value of all agricultural products in world trade. On the other hand, due to regional imbalances in crop production, this does create opportunities for brisk international trade in feedstuffs and a fairly liberal policy on such trade among nations.

Livestock Physiology. Meat animals are both capital and consumption goods. That is, the product and the machine are one and the same. This results in a short run incongruity between changes in market prices and production. When price increases, for example, the expected production response is an expansion in supply. With meat aniamls, however, the response appears to be the opposite. A price increase signals livestock producers to expand, which causes them to increase their breeding stock by actually withholding product from the market, thus reducing market supply. And vice versa for a price decrease, which brings herd liquidation and thus a bigger supply.

Because of the physiology of the reproduction cycle, it takes up

to two years to get the desired production response for swine and four years or more for cattle. This long term production response, combined with the typical desire by public policymakers for quick response to policy initiatives, makes the meat sector a poor candidate for supply management programs such as those that are used for grains, oilseeds and many other crops.

Contemporary Policy Issues

The preceding discussion shows that meat and meat animals have not and are not likely to receive much direct policy consideration as farm commodities per se. Furthermore, even though meat import quotas regularly revisit the international trade policy agenda, the worldwide pattern of trade protection for domestic meat and livestock industries appears to be so well fixed that little substantive change is likely. Discussions of meat import policy focus almost exclusively on marginal changes in quotas, consistent with whatever the current state of affairs happens to be in the domestic wholesale meat and slaughter animal markets.

Most of the food-related public policies which impact on the markets for meat and livestock do so indirectly, through longer term effects on supply costs and/or consumer demand. For example, feed grain policies and environmental regulations influence the cost of producing livestock and meat and thus the long run market supply, while policies regarding such things as dietary guidelines and product quality affect consumer demand. Indeed, the most pressing policy issues are found in these areas. On the cost or supply side, I group the current and emerging issues into three categories: animal rights, environment, and the cost of feed. On the demand side my categories are: human nutrition and health, food wholesomeness, and product standards.

There are, in addition, a number of policy issues concerning the marketing system which brings together these supply and demand forces, including such things as monopolization, pricing behavior, fair trade practices, and price reporting. These are important concerns that deserve equally careful attention. However, in keeping with the spirit of the old but wise observation that the mind can absorb only as much as the seat can endure, I have foregone a discussion of such issues here.

Animal Rights. This nation is now in the midst of its third wave of public concern over the humane treatment of animals. As early as 1873 a Federal law was passed which was intended to alleviate cruel treatment of livestock when in transit on railroads. This was replaced by a more effective measure in 1906, known as the 28 hour law, which specified minimum resting, feeding and watering requirements for livestock after 28, or in some cases 36 hours in transit. This law substantially reduced cruel treatment during transit. Thereafter, public sentiment turned to the possibilities for cruelty during slaughter. Concern peaked in the 1950's, resulting in the Humane Slaughter Act of 1958 which sets forth acceptable slaughtering practices.

More recently, public attention has been focused on the concept that confinement of livestock during production constitutes inhumane treatment. Tangential concerns with such practices as castration and branding without anaesthetic are also frequently thrown in for good measure. The development of this as a public policy issue in the United States has trailed Western Europe by 10 or 15 years. There, several countries have already passed legislation limiting confinement feeding and other practices and courts of law have ruled against farmers for such things as keeping laying hens in battery cages. Currently, all

21 Western European countries are now seeking a common policy. The issue is certain to persist in the U.S.

Earlier humane treatment movements were either efficiency positive (i.e. reduced shrink and death loss with improved transit practices) or efficiency neutral (i.e. killing practices). The current movement, however, has most appearances of being efficiency negative. Confinement feeding was adapted because it increased productivity and lowered costs. It has brought about larger production units that realize scale efficiencies. A yet unanswered question is, how will such production efficiencies be balanced against this growing concern over the psychic health of domesticated animals?

Environment. The public has long been concerned about reducing or minimizing degradation of our natural environment through the pursuit of economic gain. At one extreme are the strict preservationists who would allow no disturbance of the environment regardless of the needs of society. A large body of environmental regulations and policies already exists which places limits on such environmental distortion. Much of this affects both meat and livestock production practices and costs.

Obvious in existing policy is dispoal of livestock effluent, particularly run-off from feedlots, the disposal of blood and other waste from slaughtering, and noxious odors from rendering operations. Water pollution from slaughering and confinement livestock production has already been proscribed, and much of the cost of compliance has worked its way through to the market supply function. But, this is perhaps just the proverbial "drop in the bucket". Concerns about noxious odors from confinement livestock facilities are wide-spread in areas where these are upwind from housing developments, joining similar concerns regarding rendering plants. Noise pollution is of growing concern

in some situations. Policies are currently being put into place which limit the ability of livestock producers to control wildlife that preys on domestic animals, witness the banning of compound 1080 as a coyote predacide. Most if not all of these environmental control measures result in added costs to producers, processors and ultimately, consumers. Right-to-farm laws are emerging in many states to help preserve some existing livestock production practices, but their effectiveness is yet to be tested.

Cost of Feed. Roughly 20 percent of the cost of producing meat in the U.S. is for animal feed: more for poultry meat, less for beef. About 60 percent of the American feedgrain crop is fed to domestic livestock. Thus, the feedgrain and livestock-meat sectors are closely interlocked. Because of the large share of grain that is consumed as meat, the indirect impact of a change in the price of feedgrains on domestic consumers is more than 10 times as great as is the direct impact. 3/

The markets for feedgrains and other feedstuffs such as oilseed meals are inexorably influenced by farm commodity and international trade policies. Price supports, acreage controls, grain reserves, and export promotion are key elements. In the past decade, these policies have been oriented largely toward international markets and an expansion in export sales. Given the vagaries of world grain and oilseed markets, this has increased instability in both the availability and the price of feed for domestic livestock feeders. The result has been greater uncertainty in the livestock sector, which translates into higher production costs. The impact has probably fallen disproportionately on the beef industry

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3/ K.L. Robinson (Unstable Farm Prices: Economic Consequences and Policy Options, Am. Jour. Agr. Econ. 57:5) calculated that a 2 cent per lb. change in feedgrain prices directly affected per capita food expenditures by $2.68 and indirectly, through livestock products, by $29.00 annually.

and less so on poultry, due in large part to differences in reproduction physiology which makes the adjustment process slower and thus more difficult and costly for cattle. This differential increase in cattle production costs also explains some of the switch in consumption from beef to chicken.

The point: there is an indirect but very important link between public policies that affect feedstuffs and the role of livestock and meat in the domestic food market. My judgement is, this link has been largely ignored in the past 10-12 years by policymakers, livestock producers, meat processors, and consumers. If domestic grain and oilseed policies continue to respond primarily to pressures of the export markets, our domestic meat and livestock industries are likely to suffer the consequences of continued instability in the markets for feedstuffs.

Human Nutrition and Health. Perhaps the most contemporary of my list of current and emerging issues is concern over the relationship between meat consumption and human health. Recent attention has focused on cancer, but numerous life-shortening diseases are periodically linked to the ingestion of various food substances. The implication of such linkages, whether real or conjectured, at least for many public officials, is clear: unless you favor cancer or some other dreaded disease, you have little choice but to favor dietary modification. Often, this gets translated into public policy proposals for dietary guidelines or even outright proscription of certain (offending) food products.

The most recent articulation of this was the latest diet report from the National Academy of Sciences, entitled "Diet, Nutrition and Cancer". This report from reputable scientists said that there may be a connection between cancer and what we eat. It went on to recommend

certain dietary changes, including a reduction in salt cured, salt pickled and smoked foods such as sausages, smoked ham, bacon, bologna and hot dogs. Understandably, this kind of recommendation doesn't make livestock and meat producers very happy. It has garnered about the same industry reception as have previous reports on the deleterious impacts of fats and cholesterol.

Nonetheless, people do change their eating habits over time. Consumption of animal fats and high cholesterol foods has declined in recent years. How much is due to health considerations is not known. Establishing precise diet-disease relationships is exceptionally difficult due to the large number of variables involved, many of which aren't controllable. An important question is, how much certainty is necessary as a basis for public policy decisions?

Food Wholesomeness. Not unrelated to the preceding issue is the question of food safety. In particular, does meat contain contaminants such as diseased tissue, additives such as nitrosamines or sulpha drugs, or food-borne disease such as botulism?

In 1906, Upton Sinclair published his novel, The Jungle, which portrayed labor exploitation and unwholesome operating practices in the nation's meatpacking industry. Regardless of its accuracy, this novel excited the public's imagination, not for labor exploitation but for unwholesome meat, and resulted in enactment of the Federal Meat Inspection Act of 1906. Ever since, the meat industry has been in the forefront of food safety issues. Incidentally, in observing this outcome, socialist Sinclair lamented that he had "aimed at the public's heart, but hit its stomach instead".

Among the contemporary policy issues bound up in this area are:

(1) random instead of continuous inspection of meat processing which is currently proposed by USDA and of livestock slaughtering which is not currently proposed, (2) respecification of the Delaney clause, reflecting modern technological capability to detect additives, from the current "no risk" prohibition to an "acceptable risk" criterion, and (3) determining the appropriate balance in the use of livestock medication such as sulfa drugs between keeping animals healthy and preventing build-up of drug resistence among meat consumers.

Product Standards. Livestock and meat quality grades and product standards have become institutionalized over the past 50 years. The wholesale trade has relied on USDA grades or modifications thereof for much of their dealing in livestock and a good share of their dealing in carcass beef. Consumers have relied on grades for a portion of their beef purchases, particularly retail cuts in grocery stores and in many restaurants, and on USDA product standards for many processed meats such as hog dogs and bologna.

While there are no consumer grades for retail meat per se, "choice" beef has taken on an identity as a preferred product among consumers. This has periodically prompted various industry proposals to modify standards so that more product can be so labelled. Pressures for such change seems to increase whenever profit margins disappear for cattle feeders. Others from time to time advocate consumer grades for meats that would be tied to attributes such as tenderness, flavor and palatability.

The need for wholesale or trade grades for both livestock and meat diminished with the steady expansion in direct, private trading where trader-specified product descriptions are both feasible and satisfactory. But, the value of replacing these with consumer grades, for which the costs are high and benefits widely dispersed and of unknown magnitude

has not yet been demonstrated.

Product labeling is also of concern. Mechanically deboned meat provides one example. Regulatory changes have recently been made to require identification of such product as part of the ingredient label. These changes, however, are as controversial as was the original regulation requiring identification as part of the product name. Nutritional labeling also has many advocates, while others are concerned that this enhances the image or acceptability of fortified or fabricated meats at the expense of "the real thing".

Concluding Comment

There is not one succinct set of issues concerning meat and meat animals in U.S. food policy. But, there are indeed numerous food and farm policy issues that evolve from and/or impact on the livestock and meat sector. Because these are scattered over a wide variety of concerns and topics and often have indirect rather than direct linkages to the meat-related industries, it is perhaps more difficult to maintain an awareness of these issues and to understand the full implications of proposed public policies. Perhaps, this has helped generate an apathetic attitude by some in the meat industry to many of these issues. Yet, emerging policies often increase product and/or operating costs or negatively influence consumer perceptions of your products.

Hopefully, this discussion has helped to provide a better understanding of contemporary policy issues that are, and will, affect your business. In the end, only your well-considered input into the public policy-making process will assure the continued viability of this important industry. At the risk of being contrite, public policy is too important to be left entirely in the hands of the public.